CLAIMS

We claim:

1. A method for testing a magnetoresistive sensor for polarity reversal, comprising:

writing a test pattern on a magnetic disk;

using a magnetoresistive sensor on a slider to read a first readback signal from the test pattern;

determining the polarity of the first readback signal;

creating a protrusion on the magnetic disk;

operating the slider over the protrusion for a preset period of time;

using the magnetoresistive sensor to read a second readback signal from the test pattern;

determining the polarity of the second readback signal; and,

comparing the polarity of the first readback signal to the polarity of the second readback signal to determine if a change in polarity has occurred.

2. A method as in claim 1 wherein the protrusion is created by loading the slider on the magnetic disk while the magnetic disk is rotating.

3. A method as in claim 1 wherein the protrusion is created by sputtering material onto the magnetic disk.

4. A method as in claim 1 wherein the protrusion is created by gouging the magnetic disk.

5. A method as in claim 1 wherein the protrusion is created by locally heating the magnetic disk with a laser.

6. A method as in claim 1 wherein the test pattern on the disk includes a group of written transitions followed by a space with no transitions.

7. A method for testing a magnetoresistive sensor on a slider for polarity reversal, comprising:

creating a protrusion on the magnetic disk;

writing an asymmetrical pattern on a magnetic disk;

using the magnetoresistive sensor to read a first readback signal from the test pattern;

determining the polarity of the first readback signal;

providing a perturbation to the magnetoresistive sensor with the protrusion;

using the magnetoresistive sensor to read a second readback signal from the test pattern;

determining the polarity of the second readback signal; and,

comparing the polarity of the first readback signal to the polarity of the second readback signal to determine if a change in polarity has occurred.

8. A method as in claim 7 wherein the protrusion is created by loading the slider onto the magnetic disk while the magnetic disk is rotating.

9. A method as in claim 7 wherein the protrusion is created by sputtering material onto the magnetic disk.

10. A method as in claim 7 wherein the protrusion is created by gouging the magnetic disk.

11. A method as in claim 7 wherein the test pattern includes a group of written transitions followed by a space with no transitions.

12. A method as in claim 7 wherein the protrusion is created by locally heating the magnetic disk with a laser.